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Frank Bindel

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EXAMINER

HERRERA, DIEGO D

ART UNIT

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2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,102	<b>Applicant(s)</b> BINDEL ET AL.	
	<b>Examiner</b> DIEGO HERRERA	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 11, 13-25, 28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 13-25, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Claim 26-27 are cancelled.

### ***Response to Arguments***

Applicant's arguments filed 3/16/2011 have been fully considered but they are not persuasive. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, Lee et al., Zhang et al., and Crosbie in combination teach the limitations in the claims put forth by the applicant's representative. Contrary to applicant's assertions that the applied references do not in combination or alone meet the limitations, the combination of Lee et al., Zhang et al., and Crosbie teaches the ability of mobile device to interact between different networks of different types of capabilities also determined by the type of device seamlessly without having to break communication when moving through different networks. The typical protocols of using HLR and VLR are also well known methods used by these references.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In response to applicant's arguments against the references cited for claim 11 are in error since the limitations are broad and the limitations are met by the cited reference...wherein the roaming system of Bluetooth is adjusted to its environments by said mentioned protocols, Which are well known in the art. Types of devices are recognized and assimilated to the new network the device has roamed into these is also well known in the art and as disclosed in the cited art.

Dependent claims recite similar limitations and said limitations are read by said cited references since they are broad.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claim 11-21 and 25 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lee et al. (US 6909705 B1), Zhang et al. (US 20020054578 A1), and in view of Crosbie (US 20020035699 A1).**

**Regarding claim 11.** Lee et al. discloses a method for exchanging data using a wireless connection (title, abstract, col. 1 lines: 15-18, col. 2 lines: 9-14, 38-41, 45-67—col. 7 lines: 2, Lee et al. teaches wireless communication), comprising: providing a user with at least one portable terminal located in a transmission and reception range of at least one network (fig. 1, col. 3 lines: 3-30, Lee et al. teaches

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Bluetooth-enabled devices communicating within a network);

logging on automatically to establish a connection to the at least one network by the at least one portable terminal (col. 3 lines: 44-65, Lee et al. teaches that authentication authorization may be supported by the administrative infrastructure and intelligence for the Bluetooth network, hence, logging on automatically to at least one network);

However, Lee et al. does not disclose in detail providing a transmission channel available for the exchanging data within a framework of the connection established; wherein for the data exchange, the transmission channel is adapted automatically to a type of the at least one portable terminal and a type of data to be transmitted, by an administrator to be assigned to the network; nevertheless, Zhang et al. teaches providing a transmission channel available for data transmission within the connection established; transmission channel is adapted automatically to a type of the at least one portable terminal and a type of data to be transmitted by an administrator to be assigned to the network (title, abstract, fig. 1a-5, ¶: 49-53, 57-59, Zhang et al. teaches monitoring transmission channels and their quality of service, furthermore, the wireless host provide type of data to be adapted to users requesting services provided by the host of the 3G wireless network). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to specifically include providing a transmission channel for exchanging data of interest within a framework of the connection established, the transmission channel is adapted automatically to a type of the at least one portable terminal and a type of data to be transmitted by an administrator to be assigned to the network, as taught by Zhang et al. for the purposes

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of dynamically adaptations in transmissions (abstract). One skilled in the art would be motivated to make the combination of Lee et al. with that of the teachings of Zhang et al. to allow mobile devices in short range to communicate in different networks with different types of wireless transmission characteristics automatically as stated in references cited.

monitoring a movement of the at least one portable terminal across a boundary of the at least one network (col. 4 lines: 38-40, Lee et al. teaches handoff between networks using location data, signal quality or signal strength), wherein if the movement is to another network, another connection is established to the another network (fig. 1, col. 4 lines: 38-52, Lee et al. teaches handoff between different networks).

However, wherein the type of the at least one portable terminal and the type of data to be transmitted is provided to the administrator via at least one of a predefined user profile and a message transmitted to the administrator from the at least one portable terminal; nevertheless, Crosbie teaches the profile defining type of device and other information (fig. 9, ¶: 64-67, Crosbie teaches mobile devices being identified and authenticated when session is initiated through gateway server, furthermore, the home server reports from the gateway server information such as billing, IP address, and location of the mobile initiating session. fig. 4, ¶: 56, 62, 63, Crosbie teaches device database wherein the server recognized the unique device identifier and data traffic the mobile device is connected to or receiving). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to specifically

include an administrator to determine the type of a terminal and data of a particular user based on database information after identification determination is made and a message is sent to a home server about such information, as taught by Crosbie for the purposes of continuing interrupted information when performing a seamless roaming handoff (title, abstract) one of ordinary skill in the art would be able to combine the protocols set up in Crosbie to that in Lee et al. and Zhang et al..

**Regarding claim 25.** Lee et al. discloses an administrator comprising:

a first interface to an external network (fig. 1, col. 2 lines: 45--col. 3 lines: 2, Lee et al. teaches first interface to an external network);

a second interface (fig. 1, col. 2 lines: 45--col. 3 lines: 2, Lee et al. teaches second interface); and

a router module, wherein via the first and second interfaces a radio link suitable for data transmission is producible to a terminal present in a transmission and a reception range (col. 3 lines: 66—col. 4 lines: 5, col. 5 lines: 7-10, Lee et al. teaches routing tables for routing hence router module is present between first and second interfaces), and wherein the router module determines a type of data waiting for transmission and establishes a connection corresponding to the type of data to the terminal (col. 4 lines: 5, col. 5 lines: 7-10, Lee et al. teaches that connection through router and routing tables and other methods and protocols the type of data is transmitted to terminal), the connection established being optimized in view of at least one of the terminal, costs, and transmission speed, and wherein the administrator implements a method for exchanging data using a wireless connection (col. 3 lines: 44-65, Lee et al. teaches

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cellular network provides the administrative infrastructure and intelligence for the Bluetooth network such as authentication, registration, billing, profiling, roaming, etc... hence, the connection establish being optimized in view of at least one of the terminal, costs, and transmission speed), including:

providing a user with at least one portable terminal located in a transmission and reception range of at least one network (fig. 1, col. 3 lines: 3-30, Lee et al. teaches Bluetooth-enabled devices communicating within a network);

logging on automatically to establish a connection to the at least one network by the at least one portable terminal (col. 3 lines: 44-65, Lee et al. teaches that authentication authorization may be supported by the administrative infrastructure and intelligence for the Bluetooth network, hence, logging on automatically to at least one network);

However, Lee et al. does not discloses in detail providing a transmission channel available for the exchanging data within a framework of the connection established; wherein for the data exchange, the transmission channel is adapted automatically to a type of the at least one portable terminal and a type of data to be transmitted, by an administrator to be assigned to the network; nevertheless, Zhang et al. teaches providing a transmission channel available for data transmission within the connection established; transmission channel is adapted automatically to a type of the at least one portable terminal and a type of data to be transmitted by an administrator to be assigned to the network (title, abstract, fig. 1a-5, ¶: 49-53, 57-59, Zhang et al. teaches monitoring transmission channels and their quality of service, furthermore, the wireless host provide type of data to be adapted to users requesting services provided by the

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host of the 3G wireless network). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to specifically include providing a transmission channel for exchanging data of interest within a framework of the connection established, the transmission channel is adapted automatically to a type of the at least one portable terminal and a type of data to be transmitted by an administrator to be assigned to the network, as taught by Zhang et al. for the purposes of dynamically adaptations in transmissions (abstract). One skilled in the art would be motivated to make the combination of Lee et al. with that of the teachings of Zhang et al. to allow mobile devices in short range to communicate in different networks with different types of wireless transmission characteristics automatically as stated in references cited.

However, wherein the type of the at least one portable terminal and the type of data to be transmitted is provided to the administrator via at least one of a predefined user profile and a message transmitted to the administrator from the at least one portable terminal; nevertheless, Crosbie teaches the profile defining type of device and other information (fig. 9, ¶: 64-67, Crosbie teaches mobile devices being identified and authenticated when session is initiated through gateway server, furthermore, the home server reports from the gateway server information such as billing, IP address, and location of the mobile initiating session. fig. 4, ¶: 56, 62, 63, Crosbie teaches device database wherein the server recognized the unique device identifier and data traffic the mobile device is connected to or receiving). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to specifically

include an administrator to determine the type of a terminal and data of a particular user based on database information after identification determination is made and a message is sent to a home server about such information, as taught by Crosbie for the purposes of continuing interrupted information when performing a seamless roaming handoff (title, abstract) one of ordinary skill in the art would be able to combine the protocols set up in Crosbie to that in Lee et al. and Zhang et al..

**Consider claim 13.** The method as recited in claim 11, the combination discloses wherein the administrator is a permanently installed terminal (fig. 1c, ¶: 61, Zhang et al. teaches resource management server coupled to wireless network to provide media content requesting users), and the at least one portable terminal gains access to the at least one network which is an external communication network via the administrator (¶: 65-67, Zhang et al. teaches access by mobile to network host to network resources for downloading or streaming data), and any terminal producing access to the administrator does so via a short-range radio communication network (fig. 1, col. 3 lines: 3-30, Lee et al. teaches terminal communicating to BT Hub via short range or Bluetooth-enabled network).

**Consider claim 14.** The method as recited in claim 11, the combination discloses further comprising:  
adapting automatically a bandwidth and a handling capacity of the transmission channel to a quantity of data to be transmitted (¶: 71, Zhang et al. teaches different broadband services that required different amounts of bandwidth and have different priorities by combination of intelligent admission control, bandwidth reservation and statistical

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multiplexing).

**Consider claim 15.** The method as recited in claim 11, the combination discloses further comprising:

selecting the transmission channel from the plurality of available transmission, channels based on at least one of connection costs and handling capacity (col. 1 lines: 63-66, col. 3 lines: 51-65, col. 5 lines: 37-51, Lee et al. teaches selecting correct appropriate transmission for mobile terminal with network based on several parameters including that of costs and handling capacity).

**Consider claim 16.** The method as recited in claim 11, the combination discloses further comprising:

transmitting information regarding the type of data from the terminal to the administrator via a header of an email short message sent in advance (col. 1 lines: 63-66, col. 3 lines: 51-65, col. 5 lines: 37-51, Lee et al. teaches selecting correct appropriate transmission for mobile terminal with network based on several parameters including that of costs and handling capacity).

**Consider claim 17.** The method as recited in claim 11, the combination discloses wherein the administrator itself obtains information regarding the type of data and bandwidth needs with aid of an analysis of the data waiting for transmission (col. 1 lines: 63-66, col. 3 lines: 51-65, col. 5 lines: 37-51, Lee et al. teaches selecting correct appropriate transmission for mobile terminal with network based on several parameters including that data type through HLR or VLR or RNC or BTS).

**Consider claim 18.** The method as recited in claim 11, the combination discloses

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wherein in the course of a connection, a change is automatically carded out between at least one of the transmission channel and other transmission channels, the transmission channel and the bandwidth, the bandwidth and other bandwidths, depending on at least one of requirements and free resources (col. 2 lines: 45-63, Lee et al. teaches handoff between mobile devices and different networks, hence, change is automatically done between the transmission channels and other transmission channels).

**Consider claim 19.** The method as recited in claim 11, the combination discloses further comprising:

predefining the user profile in the terminal (col. 3 lines: 51-65, Lee et al. teaches having terminals user profile through authorization, accounting and authentication or known as AAA services);

initiating automatically the user profile with a work cycle as soon as the terminal comes in contact with the administrator (col. 3 lines: 44-65, Lee et al. teaches cellular network provides the administrative infrastructure and intelligence for the Bluetooth network such as authentication, registration, billing, profiling, roaming, etc... hence, the connection establish being optimized in view of at least one of the terminal, costs, and transmission speed),

wherein the user profile includes a prioritization of at least one of data type, bandwidth size needed, and type of portable terminal type, so that based on the transmission channel available the administrator effects the prioritization.

**Consider claim 20.** The method as recited in claim 11, the combination discloses

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wherein the transmission channel is adapted automatically to a quantity of data to be transmitted (col. 2 lines: 2-5, 54-63, Lee et al. teaches transmission of data adapted to be relayed effectively among different networks).

**Consider claim 21.** The method as recited in claim 13, the combination discloses wherein the external communication network is one of Internet and a telephone network, and wherein the short-range radio communication network is at least one of Bluetooth and wireless local area network (WLAN) (col. 2 lines: 64—col. 3 lines: 16, Lee et al. teaches internet and telephone network PSTN and Bluetooth and wireless local loop).

**Claims 22-25, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 6909705 B1), and in view of Crosbie (US 20020035699 A1).**

**Regarding claim 22.** Lee et al. discloses an administrator comprising:

a first interface to an external network (fig. 1, col. 2 lines: 45--col. 3 lines: 2, Lee et al. teaches first interface to an external network);

a second interface (fig. 1, col. 2 lines: 45--col. 3 lines: 2, Lee et al. teaches second interface); and

a router module, wherein via the first and second interfaces a radio link suitable for data transmission is producible to a terminal present in a transmission and a reception range (col. 3 lines: 66—col. 4 lines: 5, col. 5 lines: 7-10, Lee et al. teaches routing tables for routing hence router module is present between first and second interfaces), and wherein the router module determines a type of data waiting for transmission and

establishes a connection corresponding to the type of data to the terminal (col. 4 lines: 5, col. 5 lines: 7-10, Lee et al. teaches that connection through router and routing tables and other methods and protocols the type of data is transmitted to terminal), the connection established being optimized in view of at least one of the terminal, costs, and transmission speed (col. 3 lines: 44-65, Lee et al. teaches cellular network provides the administrative infrastructure and intelligence for the Bluetooth network such as authentication, registration, billing, profiling, roaming, etc... hence, the connection establish being optimized in view of at least one of the terminal, costs, and transmission speed).

However, wherein the type of the at least one portable terminal and the type of data to be transmitted is provided to the administrator via at least one of a predefined user profile and a message transmitted to the administrator from the at least one portable terminal; nevertheless, Crosbie teaches the profile defining type of device and other information (fig. 9, ¶: 64-67, Crosbie teaches mobile devices being identified and authenticated when session is initiated through gateway server, furthermore, the home server reports from the gateway server information such as billing, IP address, and location of the mobile initiating session. fig. 4, ¶: 56, 62, 63, Crosbie teaches device database wherein the server recognized the unique device identifier and data traffic the mobile device is connected to or receiving). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to specifically include an administrator to determine the type of a terminal and data of a particular user based on database information after identification determination is made and a

message is sent to a home server about such information, as taught by Crosbie for the purposes of continuing interrupted information when performing a seamless roaming handoff (title, abstract) one of ordinary skill in the art would be able to combine the protocols set up in Crosbie to that in Lee et al. and Zhang et al..

**Consider claim 23.** The administrator as recited in claim 22, the combination discloses wherein the external network is at least one of Internet and a telephone network (col. 2 lines: 64—col. 3 lines: 16, Lee et al. teaches internet and telephone network PSTN and Bluetooth and wireless local loop).

**Consider claim 24.** The administrator as recited in claim 23, the combination discloses wherein the radio link is a short-range radio link (col. 2 lines: 64—col. 3 lines: 16, Lee et al. teaches internet and telephone network PSTN and Bluetooth and wireless local loop).

**Consider claim 28.** The method of claim 11, wherein the transmission channels are determined for each data to be exchanged to ensure efficient distribution based on bandwidth requirements for the data (fig. 4, ¶: 56, 62, 63, Crosbie teaches device database wherein the server recognized the unique device identifier and data traffic the mobile device is connected to or receiving).

**Consider claim 29.** The method of claim 11, wherein the data having at least a predetermined size is automatically transmitted when short range radio communications is available (¶: 28-29, 38, Crosbie teaches presence within range discovery protocols when mobile device detects base station and established session based on range and type of data determined to be transmitted or in transmission).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEGO HERRERA whose telephone number is (571)272-0907. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Diego Herrera/  
Examiner, Art Unit 2617

/LESTER KINCAID/  
Supervisory Patent Examiner, Art Unit 2617